

## Sealing of Hydraulic Elevator Control Valves

Historically this department has required the full-load running pressure to be determined and the relief (bypass) pressure adjustment to be set in the presence of a State of Wisconsin elevator inspector and sealed by that inspector. Seals for this purpose were provided by the inspector. (Note: If the elevator is located in the City of Milwaukee contact the City of Milwaukee elevator inspection department for their sealing requirements.)

This department no longer provides seals for this purpose. In addition, qualified elevator personnel are now allowed to perform the tests and installation of these seals under certain conditions without an inspector present.

CONDITION	PROCEDURE
<p><b>(A)</b>            Existing control valve has provision for sealing but no seal is installed</p> <p style="text-align: center;"><b>OR</b></p> <p>Existing seal was broken as part of repairing the existing valve.</p> <p><b>NOTE: DELIBERATELY ADJUSTING A VALVE TO LIFT MORE THAN RATED LOAD IS NOT PERMITTED UNDER ANY CIRCUMSTANCES.</b></p>	<p><b>Is the working pressure permanently marked on the pumping unit, tank, controller or in the maintenance record, that is reasonable based on the empty-car running pressure?</b></p> <p><b>→ YES</b></p> <ol style="list-style-type: none"> <li>1). Perform the relief valve test required by 8.11.3.2.1 and the static test required by 8.11.3.2.2.</li> <li>2). Adjust if necessary.</li> <li>3). Seal the valve.</li> <li>4). Complete the Periodic Hydraulic Elevator Test form SBD-3E.</li> <li>5). Update the elevator maintenance record.</li> </ol> <p><b>→ NO</b></p> <ol style="list-style-type: none"> <li>1). Perform full load test to determine working pressure. Calculations will not be accepted in lieu of full-load determination of working pressure.</li> <li>2). Perform all steps under "Yes" above.</li> </ol>

<p><b>(B)</b>  <b>New or replacement hydraulic control valve is installed</b></p>	<p><b>Is this an Emergency Repair?</b>  <b>→ YES</b>  1). Submit application to perform the work. Check "Emergency Repair" on the application form.  2). Schedule the inspection immediately.  3). After valve installation perform full-load test to determine working pressure or calculations to estimate working pressure.  4). Adjust relief setting as necessary.  5). Seal the setting – elevator is permitted to be placed in service.  6). Update the elevator maintenance record.  7). In the presence of the inspector, perform full-load test to verify working pressure. Calculations will not be accepted in lieu of full-load determination of working pressure for final sealing. If necessary, adjust relief setting and reseal valve.  8). Update the elevator maintenance record.</p> <p><b>→ NO</b>  1). Submit application to perform the work.  2). Schedule the inspection for completion date.  3). In the presence of the inspector, perform full load test to determine working pressure. Calculations will not be accepted in lieu of full-load determination of working pressure.  4). Adjust relief setting as necessary.  5). Seal the setting.  6). Update the elevator maintenance record.</p>
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<p><b>(C)</b>  <b>Valve is sealed by another contractor or by a State inspector in the past.</b>  *Some seals were installed by inspectors without witnessing full-load tests. This will assure that settings are correct.</p>	<p><b>Are working and relief pressures noted and do actual pressures match these?</b>  <b>→ YES</b>  Leave the valve as it is.  <b>→ NO</b>  Go to (A) on this chart.</p>
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<b>(D)</b> <b>Valve cannot be sealed</b> *The sealing of valves was not required for elevators with contract dates prior to November 1, 1964.	<b>Are working and relief pressures noted and do actual pressures match these?</b> <b>→ YES</b> Leave the valve as it is. <b>→ NO</b> Perform tests in (A) on this chart.
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Elevator companies are encouraged to provide their own unique seal. Hydraulic valve seals must be provided with a metal tag meeting 8.11.1.6.

This will remain the department policy until the department accepts a change or later interpretation to this code requirement.

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